RDE GTR:
Scope of U.S. Work to Inform Development of GTR

APRIL 2019

Principles for Developing a LD RDE Procedure for the United States

- Procedure that captures in-use emissions performance of passenger vehicles
- Procedure that can use data from any in-use test and compare it to the applicable standard
- Streamline the Auxiliary Emission Control Device (AECD) approval process

Overview of U.S. EPA's RDE Activities

- **Evaluate existing PEMS data from EPA's in-use routes**
  - **See if RDE identifies in-use emission problems that our current process has found**
  - **Test out new ideas for processing PEMS data**
- **Collect additional data compliant with the RDE procedures**
- Determine if the PEMS measurement uncertainties published in RDE4 are appropriate for the US standards
- Look into how emission calculations compare with 40 CFR 1065
- Determine how much of US driving is covered by the current EU RDE procedures

Current/ Future Actions

- Develop our own data analysis tool to test current and future RDE procedures
  - We are currently in the process of validating our analysis tool with EMROAD
- Plans for future testing
  - PEMS testing: in addition to our existing in-use routes we will be using a route that is compliant with RDE4
  - Chassis Testing: test vehicles on U.S. cycles as well as the 4 phase WLTC
- Analyze existing PEMS data
  - Up to 25 vehicles from previous compliance tests
  - Additional vehicles from US EPA research activities
  - Data provided by other countries and organizations

Sample plot from initial comparison between EPA tool and EMROAD